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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/693,606

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Robert O. Banker

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11/15/2006

SCIENTIFIC-ATLANTA, INC.  
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EXAMINER

VU, NGOC K

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/693,606

Applicant(s)

BANKER ET AL.

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/06 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie et al. (US 5,850,218 A) in view of Hendricks et al. (US 5,990,927 A).

Regarding claim 1, LaJoie teaches a method for providing a television menu comprising: storing, in a memory (32 – figure 3) associated with a settop terminal STT (6 – figure 3), a plurality of service identifiers in a first data structure (service table) (see figures 3 & 5; col. 4, line

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66 to col. 5, line 26); storing, in the memory associated with the STT, a plurality of channel identifiers in a second data structure (channel table), each channel identifier being associated with a pointer to one of the plurality of service identifiers that are stored in the first data structure and each channel identifier further representing a plurality of television channels available for selection by a user of the STT (for instance, channel 12 is associated with a music service, channel 14 is associated with a NVOD service, channel 15 is associated with a VOD service, channel 16 is associated with online interactive service such as shopping, Internet, Email, etc. - see col. 4, line 66 to col. 5, line 40; col. 16, line 10 to col. 17, line 10 and figure 5); and selecting one of the plurality of television channels via the STT (col. 15, lines 12-17 and col. 15, line 56 to col. 16, line 9)

LaJoie discloses that using channel table 101 and service table 103, set top terminal can identify specific service associated with a channel through a pointer pointing from the channel table to the service table. (See col. 16, lines 10-27 and figure 5). For instance, if a user selects a particular channel to access VOD service, the set top terminal can identify VOD service associated with channel 15 through a pointer pointing from the channel table 101 to the service table 103. Similarly, if the user selects a particular channel to access online interactive service, the set top terminal identifies online interactive service associated with channel 16 through a pointer pointing from the channel table 101 to the service table 103.

LaJoie does not explicitly disclose storing the service identifiers associated with respective definitional information regarding a plurality of television menus in which each of the television menus includes at least one television menu option, and providing one of television menus of the plurality of television menus to the user that includes the at least one television menu option in response to an input signal from a user.

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However, Hendricks discloses storing menu templates in a memory of a set top terminal. Once the menu templates have been stored in the memory, the set top terminal can generate specific menu on the television screen that correspond to the inputs the subscriber selects. It is noted that the system of Hendricks provides a different types of menus to subscriber. The set top terminal is able to determine the proper menu location for each program and the proper time and channel to activate for the subscriber after a menu selection. Furthermore, each menu comprises at least one television menu option. For instance, a broadcast TV menu comprises a plurality of program categories options as shown in figure 16a. A music menu as shown in figure 21 comprises a plurality of options to allow the user to select for listening or purchasing. (See col. 10, line 60 to col. 11, line 23 figures 16a and 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of LaJoie by storing menu templates associated with a plurality services regarding a plurality of television menus in which each of the television menus includes at least one television menu option, and providing one of television menus of the plurality of television menus to the user that includes the at least one television menu option in response to an input signal from a user as taught by Hendricks in order to effectively provide on-screen menus and allow users to easily navigate through choices or options using on-screen menus.

Regarding claim 2, the combined teaching of LaJoie and Hendricks further includes that the service provided is identified by an operating system (LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

Regarding claim 3, the combined teaching of LaJoie and Hendricks further includes that the service is identified by information previously stored in memory (of set top terminal – see LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

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Regarding claim 4, LaJoie as modified by Hendricks further teaches that a user input corresponds to a predetermined input signal (to select menu options or choices – see col. 37, line 49 to col. 38, line 22; figures 16a and 21).

Regarding claim 5, LaJoie teaches a programmable television services client device (6 – figure 3) that provides television control services, said client device (6) comprising: a device (remote control 59) configured to select one of a plurality of television channels (see figure 3); a memory (32 – figure 3) configured to store a plurality of service identifiers in a first data structure (service table) (see figures 3 & 5; col. 4, line 66 to col. 5, line 26) and a plurality of channel identifiers in a second data structure (channel table), each channel identifier being associated with a pointer to one of the plurality of service identifiers that are stored in the first data structure and each channel identifier further representing a plurality of television channels available for selection by a user of the STT (for instance, channel 12 is associated with a music service, channel 14 is associated with a NVOD service, channel 15 is associated with a VOD service, channel 16 is associated with online interactive service such as shopping, Internet, Email, etc. – see col. 4, line 66 to col. 5, line 40; col. 16, line 10 to col. 17, line 10 and figure 5); and a processor (30) coupled to said memory that is configured to receive an input signal from a user (col. 15, lines 12-17 and col. 15, line 56 to col. 16, line 9 and figure 3).

LaJoie discloses that using channel table 101 and service table 103, set top terminal can identify specific service associated with a channel through a pointer pointing from the channel table to the service table. (See col. 16, lines 10-27 and figure 5). For instance, if a user selects a particular channel to access VOD service, the set top terminal can identify VOD service associated with channel 15 through a pointer pointing from the channel table 101 to the service table 103. Similarly, if the user selects a particular channel to access online interactive

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service, the set top terminal identifies online interactive service associated with channel 16 through a pointer pointing from the channel table 101 to the service table 103.

LaJoie does not explicitly disclose storing the service identifiers associated with respective definitional information regarding a plurality of television menus in which each of the television menus includes at least one television menu option, and providing one of television menus of the plurality of television menus to the user that includes the at least one television menu option in response to an input signal from a user.

However, Hendricks discloses storing menu templates in a memory of a set top terminal. Once the menu templates have been stored in the memory, the set top terminal can generate specific menu on the television screen that correspond to the inputs the subscriber selects. It is noted that the system of Hendricks provides a different types of menus to subscriber. The set top terminal is able to determine the proper menu location for each program and the proper time and channel to activate for the subscriber after a menu selection. Furthermore, each menu comprises at least one television menu option. For instance, a broadcast TV service menu comprises a plurality of program categories options as shown in figure 16a. A music service menu as shown in figure 21 comprises a plurality of options to allow the user to select for listening or purchasing. (See col. 10, line 60 to col. 11, line 23; figures 16a and 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of LaJoie by storing menu templates associated with a plurality services regarding a plurality of television menus in which each of the television menus includes at least one television menu option, and providing one of television menus of the plurality of television menus to the user that includes the at least one television menu option in response to an input signal from a user as taught by Hendricks in order to effectively provide on-screen menus and allow users to easily navigate through choices or options using on-screen menus.

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Regarding claim 6, the combined teaching of LaJoie and Hendricks further includes that the service is identified by information previously stored in memory (of set top terminal – see LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

Regarding claim 7, the combined teaching of LaJoie and Hendricks further includes that the service provided is identified by an operating system (LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

Regarding claim 8, LaJoie as modified by Hendricks further teaches that a user input corresponds to a predetermined input signal (to select menu options or choices – see Hendricks: col. 37, line 49 to col. 38, line 22; figures 16a and 21).

Claim 19 recites the similar limitations of claim 5, therefore, claim 19 is rejected for the same reasons as addressed with respect to claim 5 above.

Regarding claim 20, LaJoie teaches that the television channel is television services channel (i.e., channel 16 – see col. 16, lines 24-27 and figure 5).

Claim 21 recites the similar limitations of claim 1, therefore, claim 21 is rejected for the same reasons as addressed with respect to claim 1 above.

Regarding claim 22, LaJoie teaches that the television channel is television services channel (i.e., channel 16 – see col. 16, lines 24-27 and figure 5).

5. Claims 9-18 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 5,990,927 A) in view of LaJoie et al. (US 5,850,218 A).

Regarding claim 9, Hendricks teaches a programmable television services client device (220 – figure 4) that provides television control services, said client device comprising: a device (remote control 626 – see figure 4) configured to select one of a plurality of television services; memory (620 – figure 4) configured to store definitional information (menu templates) regarding



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a plurality of television menus in which each television menu includes at least one television menu option (as shown in figures 16a and 21), the at least one television menu option being defined for each television menu based on each television service (For instance, a broadcast TV menu comprises a plurality of program categories options as shown in figure 16a. A music menu as shown in figure 21 comprises a plurality of options to allow the user to select for listening or purchasing. See col. 10, line 60 to col. 11, line 23; figures 16a and 21); and a processor (602 – figure 4) coupled to said memory that is configured to receive an input signal corresponding to a menu command, and responsive to receiving the input signal (col. 17, lines 44-53 and figure 4); identify a television service that is currently being provided to the user, and provide the corresponding one of the television menus of the plurality of television menus to the user that includes at least one television menu option that is selected based on the identified television service, wherein a corresponding one of the television menus of the plurality of television menus is provided for each and every television service of the plurality of television services in response to selection thereof, the provided corresponding one of the television menus of the plurality of television menus including at least one television menu option that corresponds to the selected television service (it is noted that the set top terminal is able to determine the proper menu location to activate for the subscriber after a menu selection. That is, the set top terminal identifies a selected television service to provide the subscriber the appropriate menu comprising at least one menu options associated with the selected service. For instance, a broadcast TV service menu comprises a plurality of program categories options as shown in figure 16a. A music service menu as shown in figure 21 comprises a plurality of options to allow the user to select for listening or purchasing. (See col. 10, line 60 to col. 11, line 23; figures 16a and 21).

Hendricks does not explicitly teach storing a plurality of services identifiers in a first data structure, the service identifiers associated with a respective application identifier, and identifying the television service being provided to user by an application identified by a respective application identifier.

However, LaJoie discloses storing a plurality of service identifiers in a service table 103 and a plurality of channel identifiers in a channel table 101. These tables create a level of indirection between the displayed channel number and programs and services being provided. By identifying the type of services associated with each channel, the set top terminal remains aware of whether software or application needs to be executed in order to implement a particular service when the service associated with a channel number is selected by a subscriber. For instance, when subscriber selects channel number 10 corresponding to Internet service such as World Wide Web browser or Internet E-mail, a service type identifier in the service table indexed by channel number might instruct the set top terminal to execute the appropriate World Wide Web browser or application or Internet E-mail software. (See col. 4, line 66 to col. 5, line 50; col. 16, line 10 to col. 17, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks by storing a plurality of services identifiers in a service table, the service identifiers associated with a respective application identifier, and identifying the television service being provided to user by an application or software identified by a respective application identifier as taught by LaJoie in order to allow programs/services to be arranged in any channel number order and effectively provide a mechanism to control a variety of different types of programs and services.

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Regarding claim 10, the combined teaching of Hendricks and LaJoie includes that the television service is an information service (see Hendricks: figures 16a and 21; LaJoie: col. 16, lines 24-28).

Regarding claim 11, the combined teaching of LaJoie and Hendricks further includes that the service is identified by information previously stored in memory (of set top terminal – see LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

Regarding claim 12, the combined teaching of LaJoie and Hendricks further includes that the service provided is identified by an operating system (LaJoie: col. 16, lines 10-28; col. 5, lines 23-25 and figure 5; Hendricks: col. 10, line 61 to col. 11, lines 23).

Regarding claim 13, LaJoie as modified by Hendricks further teaches that a user input corresponds to a predetermined input signal (to select menu options or choices – see col. 37, line 49 to col. 38, line 22; figures 16a and 21).

Claims 14 and 23 recite the similar limitations of claim 9, therefore, claims 14 and 23 are rejected for the same reasons as addressed with respect to claim 9 above.

Claims 15 and 24, see rejection of claim 10 above.

Claim 16, see rejection of claim 12 above.

Claim 17, see rejection of claim 11 above.

Claim 18, see rejection of claim 13 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ngoc K. Vu  
Primary Examiner  
Art Unit 2623

November 13, 2006